What we claim is:

1: A process for identifying bacterial colonization factors in a culture of entero-toxigenic E. coli bacteria comprising the steps of:

1) suspending bacteria in an isotonic solution, followed by heating for 15 to 30 minutes at a temperature sufficient to release the colonization factors into solution,

2) centrifuging the product obtained in step 1, then discarding the precipitate obtained after centrifugation while retaining the supernatant,

3) adding sufficient ammonium sulfate to the supernatant obtained in step 2 to obtain a concentration of 15% to 50% saturation of ammonium sulfate until a precipitate is seen,

4) centrifuging the product of step 3 containing the precipitate to pelletize the precipitate,

5) dissolving the pellet obtained in step 4 in water and dialyzing to remove ammonium sulfate and other small molecules and retaining the material remaining inside the dialysis membrane,

6) drying the product retained in the dialysis membrane in step 5 to obtain dried colonization factor,

7) solubilizing the dried colonization factor obtained in step 6 by first dissolving in 1,1,1,3,3,3-hexafluoro-2-propanol, then adding a volatile acid in aqueous solution to provide solubilized colonization factor,

8) subjecting solution containing solubilized colonization factor obtained in step 7 to mass spectrometry to determine mass, and comparing mass of proteins found therein with mass of known colonization factors.

2. A method of solubilizing colonization factor comprising the steps of

1) dissolving the colonization factor in 1,1,1,3,3,3-hexafluoro-2-propanol, then

2) adding an acidified aqueous solution which has been acidified with a volatile acid to the composition obtained in step 1.

3. A composition of matter consisting essentially of at least one partially purified bacterial colonization factor solubilized in 1,1,1,3,3,3-hexafluoro-2-propanol.

4. A method of claim 2 wherein the volatile acid is acetic acid.

5. A method of claim 1 wherein, in step 1, the bacteria in isotonic solution is heated for about 20 minutes at about 65°C.

6. A method of claim 1 wherein the CF is solubilized before subjection to mass spectrometry by dissolving in 1,1,1,3,3,3-hexafluoro-2-propanol followed by addition of an acid in aqueous solution.

8. A method of claim 1 wherein, in step 8, the solution is scanned at m/z 1400 to m/z 2500.

9. A composition of matter comprising a partially purified bacterial colonization factor of an entero-toxigenic E. coli in 1,1,1,3,3,3-hexafluoro-2-propanol which does not contain a volatile acid.